

**Appendix**

**Publications**

**(January 1 through December 31, 2004)**



## Papers Published in Peer-Reviewed Journals and Books

*Arranged alphabetically by Journal title.*

*We have attempted to note LLNL authors where there are multiple institutions.*

*Primary Division affiliation is shown (many cross Division boundaries).*

### A

Imhoff, P.T., Univ. of Delaware; Tompson, A.F.B., LLNL;	A Tribute to George F. Pinder	Adv. Water Resources 27(4), 307-309	Env Sci
Cahill, T.A., Cliff, S.S., Perry, K.D., Jimenez Cruz, M., Bench, G., LLNL; Grant, P.G., LLNL; Ueda, D., Shackelford, J.F., Dunlap, M., Meier, M., Kelly, P.B., Riddle, S., Selco, J., Leifer, R.	Analysis of Aerosols from the World Trade Center Collapse Site, New York, October 2 to 30, 2001	Aerosol Sci. Technol. 38, 165-183	Env Sci
Lin, Y., Dueker, S.R., Follett, J.R., Fadel, J.G., Arjomand, A., Schneider, P.D., Miller, J.W., Green, R., Buchholz, B.A., LLNL; Vogel, J.S., LLNL; Phair, R.D., Clifford, A.J.;	Quantitation of in vivo human folate metabolism	Am. J. Clin. Nutr. 80(3), 680-691	Env Sci
Fridriksson, T., Stanford University; Neuhoff, P.S., University of Florida; Viani, B.E., LLNL; Bird, D.K., Stanford University;	Experimental Determination of Thermodynamic Properties of Ion-Exchange in Heulandite: Binary Ion-Exchange Experiments at 55 and 85°C Involving Ca <sup>2+</sup> , Sr <sup>2+</sup> , Na <sup>+</sup> , and K <sup>+</sup>	Am. J. Science 304, 287-332	Env Sci
Love, A.H., Hunt, J.R., Vogel, J.S., LLNL; Knezovich, J.P., LLNL;	Improving tritium exposure reconstructions using accelerator mass spectrometry	Anal. Bioanal. Chem. 379(2), 198-203	Env Sci
Palmlad, M., LLNL; Bench, G., LLNL; Vogel, J.S., LLNL;	Mass by Energy Loss Quantitation as a Practical Sub-Microgram Balance	Anal. Chem. 77, 952-953; DOI: 10.1021/ac048560u	Env Sci

### B

Phillips, T.J., LLNL; Potter, G.L., LLNL; Williamson, D.L., National Center for Atmospheric Research; Cederwall, R.T., LLNL; Boyle, J.S., LLNL; Fiorino, M., LLNL; Hnilo, J.J., LLNL; Olson, J.G., National Center for Atmospheric Research; Xie, S., LLNL; Yio J.J., LLNL;	The CCPP-ARM Parameterization Testbed (CAPT): Where Climate Simulation Meets Weather Prediction	Bull. Atmospheric Sciences 85, 1903-1915	Atm Sci
Malagnini, L., Istituto Nazionale di Geofisica e Vulcanologia, Rome, Italy; Mayeda, K.M., LLNL; Akinci, A., Istituto Nazionale di Geofisica e Vulcanologia, Rome, Italy; Bragato, P.L., Istituto Nazionale di Oceanografia e di Geofisica Sperimentale, Italy;	Estimating Absolute Site Effects	Bull. Seismology Society of America 94(4), 1343-1352	Earth Sci

## C

Kerr-Ferrey, L.A., Moss Landing Marine Laboratories; Andrews, A.H., Moss Landing Marine Laboratories; Frantz, B.R., LLNL; Coale, K.H., Moss Landing Marine Laboratories; Brown, T.A., LLNL; Cailliet, G.M., Moss Landing Marine Laboratories;	Radiocarbon in otoliths of yelloweye rockfish ( <i>Sebastodes ruberrimus</i> ): a reference time series for the coastal waters of southeast Alaska	Canadian J. Fisheries and Env Aquatic Sciences 61, 443	Sci
Rard, J.A. , LLNL; Wijesinghe, A.M., LLNL; Wolery, T.J., LLNL;	Review of the Thermodynamic Properties of Mg(NO <sub>3</sub> ) <sub>2</sub> (ap), and Their Representation with the Standard and Extended Ion-Interaction (Pitzer) Models at 298.15 K	Chemical and Engineering Data 49, 1127-1140	Env Sci
Baumann, T., Gash, A., Chinn, S., Sawvel, A., LLNL; Maxwell, R., LLNL; Satcher Jr., J.	Synthesis of High Surface Area Alumina Aerogels without the Use of Alkoxide Precursors	Chemistry of Materials 17, 395-401	Env Sci
Love, A.H., LLNL; Vance, A.L., LLNL; Reynolds, J.G., LLNL; Davisson, M.L., LLNL;	Investigating the Affinities and Persistence of VX Nerve Agent in Environmental Matrices	Chemosphere 57, 1257-1264.	Env Sci
Keating, G.A., LLNL; Bogen, K.T., LLNL;	Estimates of heterocyclic amine intake in the US population	Chromatography B 802, 127-133	Env Sci
Coquard, J., LLNL; Duffy, P.B., LLNL; Taylor, K.E., LLNL; Iorio, J.P., Stanford University;	Present and future surface climate in the western USA as simulated by 15 global climate models	Climate Dynamics 23, 455-472	Atm Sci
Hannachi, A., Stephenson, D.B., Sperber, K.R., LLNL	Probability-based methods for quantifying nonlinearity in the ENSO (vol 20), pg 241, 2003	Climate Dynamics 22(1), 69-70	Atm Sci
Iorio J., Duffy, P.B., LLNL; Govindasamy, B., LLNL	Effects of Model Resolution and Subgrid-Scale Physics on the Simulation of Daily Precipitation in the Continental United States	Climate Dynamics 23(3-4, 243-258	Atm Sci
Sperber, K.R., LLNL; Gualdi, S., National Inst. of Geophysics and Volcanology, Italy; Legutke, S., M & D Group, Germany; Gayler, V., M & D Group, Germany;	The Madden-Julian Oscillation in ECHAM4 Coupled and Uncoupled GCMs	Climate Dynamics 23(3-4), 259-278	Atm Sci

## D

Sandhu, P., Vogel, J.S., LLNL; Rose, M.J., Ubick, E.A., Brunner, J.E., Wallace, M.A., Adelsberger, J.K., Baker, M.P., Henderson, P.T., Pearson, P.G., Baillie, T.A.	Evaluation of microdosing strategies for studies in preclinical drug development: demonstration of linear pharmacokinetics in dogs of a nucleoside analog over a 50-fold dose range	Drug Metab. Dispos. 32(11), 1254-9	Env Sci
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**E**

Daeron, M., IPG, Paris; Benedetti, L., CEREGE, Aix-en Provence, France; Tappognier, P., IPG, Paris; Sursock, A., National Geophysics Center, Beirut; Finkel, R., LLNL;	Constraints on the post 30 ka slip rate of the Yammouneh fault (Lebanon) using <i>in situ</i> cosmogenic $^{36}\text{Cl}$ dating of offset limestone fans	Earth and Planetary Sciences 227(1-2), 105-119	Env Sci
Palumbo, L., CEREGE, Aix en Province; Benedetti, L., CEREGE, Aix en Province; Bourles, D., CEREGE, Aix en Province; Cinque, A., University Federico II, Naples; Finkel, R., LLNL;	Slip history of the Magnola fault (Apennines, Central Italy) from $^{36}\text{Cl}$ surface exposure dating: Evidence for strong earthquakes over the Holocene	Earth and Planetary Science Letters 225(1-2), 163-176	Env Sci
Riebe, C.S., UC Berkeley; Kirchner, J.W., UC Berkeley; Finkel, R.C., LLNL;	Sharp decrease in long-term chemical weathering rates along an altitudinal transect	Earth and Planetary Science Letters 218(3-4), 421-434	Env Sci
Riebe, C.S., UC Berkeley; Kirchner, J.W., UC Berkeley; Finkel, R.C., LLNL;	Erosional and climatic effects on long-term chemical weathering rates in granitic landscapes spanning diverse climate regimes	Earth and Planetary Science Letters 224(3-4), 547-562	Env Sci
Bench, G., LLNL;	Measurement of contemporary and fossil carbon contents of PM 2.5 aerosols: results from Turtleback Dome, Yosemite National Park	Environmental Science and Technology 38, 2424-2427	Env Sci

**F**

Friedmann, S.J., LLNL; Homer-Dixon, T., Univ. Toronto;	The Energy Box	Foreign Affairs 83(6), 71-82	Env Sci
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**G**

Johnson, J.W., LLNL; Nitao, J.J., LLNL; Knauss, K.G., LLNL;	Reactive Transport Modeling of CO <sub>2</sub> Storage in Saline Aquifers to Elucidate Fundamental Processes, Trapping Mechanisms, and Sequestration Partitioning	Geological Society of London Special Publication 233, 107-128	Env Sci
Stock, G.M., UC Santa Cruz; Anderson, R.S., UC Santa Cruz; Finkel, R.C., LLNL;	Pace of Landscape Evolution in the Sierra Nevada, California, Revealed by Cosmogenic Dating of Cave Sediments	Geology 32(3), 193-196	Env Sci
Barnard, P.L., LLNL; Owen, L.A., UC Riverside; Sharma, M.C., Nehru University, New Delhi, India; Finkel, R.C., LLNL;	Late Quaternary (Holocene) landscape evolution of a monsoon-influenced high Himalayan valley, Gori Ganga, Nanda Devi, NE Garhwal	Geomorphology 61(1-2), 91-110	Env Sci

Morasca, P., University of Genova; Mayeda, K., LLNL; Malagnini, L., INGV, Rome; Walter, W., LLNL;	Coda-Derived Source Spectra, Moment Magnitudes, and Energy-Moment Scaling in the Western Alps	Geophys. J. Int. 160, doi: 10.1111/j.1365-246X.2005.02491.x	Earth Sci
Eken, T., Bogazici University; Mayeda, K., LLNL, Hofstetter G.A.; Gök, R., LLNL; Örgülü, G., Bogazici University; Turkelli, N., Bogazici University;	An Application of the Coda Methodology for Moment-rate Spectra Using Broadband Stations in Turkey	Geophys. Res. Letters 31, Earth L11609, doi:10.1029/2004GL019627	Earth Sci
Matsumoto, K., Sarmiento, J.L., Key, R.M., Aumont, O., Bullister, J.L., Caldeira, K., LLNL; Campin, J.M., Doney, S.C., Drange, H., Dutay, J.C., Follows, M., Gao, Y., Gnanadesikan, A., Gruber, N., Ishida, A., Joos, F., Lindsay, K., Maier-Reimer, E., Marshall, J.C., Matear, R.J., Monfray, P., Mouchet, A., Najjar, R., Plattner, G.K., Schlitzer, R., Slater, R., Swathi, P.S., Totterdell, I.J., Weirig, M.F., Yamanaka, Y., Yool, A., Orr, J.C.	Evaluation of ocean carbon cycle models with data-based metrics	Geophys. Res. Letters 31: Atm Art. No. L007303	Atm Sci
Thompson, S.L., Govindasamy, B. Mirin, A.	Quantifying the effects of CO2-fertilized vegetation on future global climate and carbon dynamics	Geophys. Res. Letters 31(23): Art. No. L23211	Atm Sci
Covey, C., AchutaRao, K., Gleckler, P.	Coupled ocean-atmosphere climate simulations compared with simulations using prescribed sea surface temperature: effect of a "perfect ocean"	Global and Planetary Change 41(1), 1-14	Atm Sci
Doney, S.C., Lindsay, K., Caldeira, K., Campin, J.M., Drange, H., Dutay, J.C., Follows, M., Gao, Y., Gnanadesikan, A., Gruber, N., Ishida, A., Joos, F., Madec, G., Maier-Reimer, E., Marshall, J.C., Matear, R.J., Monfray, P., Mouchet, A., Najjar, R., Orr, J.C., Plattner, G.K., Sarmiento, J., Schlitzer, R., Slater, R., Totterdell, I.J., Weirig, M.F., Yamanaka, Y., Yool, A.	Evaluating global ocean carbon models: The importance of realistic physics	Global Biogeochemical Cycles 18(3): Art. No. GB3017	Atm Sci

## I

Connaire, M.O., Curran, H.J., Simmie, J.M., Pitz, W.J., Westbrook, C.K.	A Comprehensive Modeling Study of Hydrogen Oxidation	Int. J. Chemical Kinetics 36, 603-622	Enrgy Tech
Raber, E., LLNL; Carlsen, T., LLNL; Folks, K., LLNL; Kirvel, R., LLNL; Daniels, J., LLNL; Bogen, K.T., LLNL;	How clean is clean enough? Recent developments in response to threats posed by chemical and biological warfare agents	Int. J. Environmental Health Research 14(1), 31-41	Env Sci

**J**

Li, Y., Shawgo, R.S., Tyler, B., Henderson, P.T., Vogel, J.S., Rosenberg, A., Storm, P.B., Langer, R., Brem, H., Cima, M.J.	In vivo release from a drug delivery MEMS device	J. Control Release 100(2), 211-9	Env Sci
Roberts, J.J., Wildenschild, D., LLNL;	Electrical Properties of Sand-clay Mixtures Containing Trichloroethylene and Ethanol	J. Env. & Engineering Geophysics 9, 1-10	Earth Sci
Schaldach, C.M., Bourcier, W.L., Paul, P.H., Wilson, W.D.	Electrostatic potentials and fields in the vicinity of engineered nanostructures	J. Colloid and Int. Sci. 275, 601	Env Sci
Calhoun, R., LLNL; Gouveia, F., LLNL; Shinn, J., LLNL; Chan, S., LLNL; Stevens, D., LLNL; Lee, R., LLNL; Leone, J., LLNL;	Flow Around a Complex Building: Comparisons between Experiments and RANS	J. Applied Meteorology 43(5), 696-710	Atm Sci
Berryman, J.G., LLNL;	Bounds on Elastic Constants for Random Polycrystals of Laminates	J. Applied Physics 96, 4281	Earth Sci
Piper, M., Program in Atmospheric and Oceanic Sciences, University of Colorado at Boulder; Lundquist, J.K., LLNL;	Surface-layer turbulence measurements during a frontal passage	J. Atm. Sci. 16(14), 1768- 1780	Atm Sci
Palmblad, M., LLNL; Vogel, J.S., LLNL;	Quantitation of Binding, Recovery and Desalting Efficiency of Peptides and Proteins in Solid Phase Extraction Micropipette Tips	J. Chromatography B 814, 309-313	Env Sci
Duffy, P.B., LLNL; Iorio, J.P., LLNL; Govindasamy, B., LLNL; Thompson, S.L., LLNL; Khairoutdinov, M., Colorado State University; Randall, D., Colorado State University;	Effects of Model Resolution and Subgrid-Scale Physics on the Simulation of Daily Precipitation in the Continental United States	J. Climate, Climate Dynamics 23, 243-258	Atm Sci
Liu, P., University of Hawaii; Wang, B., University of Hawaii; Sperber, K.R., LLNL; Li, T., University of Hawaii; Meehl, G.A., National Center for Atmospheric Research;	The Madden-Julian Oscillation in the National Center for Atmospheric Research Community Atmospheric Model-2 with the Tiedtke Convective Scheme	J. Climate, Climate Dynamics 9/2004	Atm Sci
Considine, D.B., Connell, P.S., Bergmann, D.J., Rotman, D.A., Strahan, S.E.	Sensitivity of Global Modeling Initiative CTM predictions of Antarctic ozone recovery to GCM and DAS generated meteorological fields	J. Geophys. Research 109, D15301	Atm Sci
Meriaux, A., LLNL; Ryerson, F.J., LLNL; Tapponier, P., Van der Woerd, J., LLNL; Finkel, R.C., LLNL; Xu, X.W., Xu, Z., Caffee, M.	Rapid slip along the central Altyn Tagh Fault: Morphochronologic evidence from Cherchen He and Sulamu Tagh	J. Geophys. Research - Earth Solid Earth 109 (B06401), doi:10.1029/2003JB002558	Earth Sci

Mueller, K., Cao, L., Caldeira, K., Jain, A.	Differing methods of accounting ocean carbon sequestration efficiency	J. Geophys. Research-Oceans 109(C12): Art. No. C12018	Atm Sci
Rotman, D.A., Atherton, C.S., Bergmann, D.J., Caneron-Smith, P.J., Chuang, C.C., Connell, P.S., Dignon, J.E., Franz, A., Grant, K.E., Kinnison, D.E., Molenkamp, C.R., Proctor, D.D., Tannahill, J.R.	IMPACT, the LLNL 3-D global atmospheric chemical transport model for the combined troposphere and stratosphere: Model description and analysis of ozone and other trace gases	J. Geophys. Research 109, D04303, doi:10.1029/2002JD003155	Atm Sci
Santer, B., LLNL; Wiglet, T., NCAR; Simmons, A., European Centre for Medium Range Weather Forecasts; Kallberg, P., European Centre; Kelly, G., European Centre; Uppala, S., European Centre; Ammann, C., NCAR; Boyle, J., LLNL; Bruggemann, W., University Birmingham; Doutriaux, C., LLNL; Fiorino, M., LLNL; Mears, C., Remote Sensing Systems; Meehl, G., NCAR; Sausen, R., Deutsches Zentrum fur Luft-und Raumfahrt; Taylor, K., LLNL; Washington, W., NCAR; Wehner, M., Lawrence Berkeley National Laboratory; Wentz, F., Remote Sensing Systems:	Identification of Anthropogenic Climate Change Using a Second-Generation Reanalysis	J. Geophys. Research-Atmospheres 109, D21104, doi:10.1029/2004JD005075, 2004	Atm Sci
Xie, S., Cederwall, R.	Developing long-term single-column model/cloud system-resolving model forcing data using numerical weather prediction products constrained by surface and top of the atmosphere observations	J. Geophys. Research 109, D01104	Atm Sci
Xie, S., LLNL; Boyle, J.S., LLNL; Cederwall, R.T., LLNL; Potter, G.L., LLNL; Zhang, M., SUNY at Stony Brook; Lin, W., SUNY at Stony Brook;	Impact of a Revised Convective Triggering Mechanism on CAM2 Model Simulations: Results from Short-Range Weather Forecasts	J. Geophys. Research 109, D14102, doi: 10.1029/2004JD004692, 2004	Atm Sci
Welten, K.C., UC Berkeley; Nishiizumi, K., UC Berkeley; Finkel, R.C., LLNL; Hillegonds, D.J., LLNL; Jull, A.J.T., University of Arizona; Franke, L., Max-Planck-Institut für Chemie, Mainz; Schultz, L., Max-Planck-Institut für Chemie, Mainz;	Exposure History and Terrestrial Ages of Ordinary Chondrites from the Dar Al Gani Region, Libya	Meteoritics and Planetary Science 39(3), 481-498	Env Sci
Enns, L., Cross Cancer Inst., Edmonton, Alberta (Canada); Bogen, K.T., LLNL; Wizniak, J., Cross Cancer Inst., Edmonton, Alberta (Canada); Murtha, A.D., Cross Cancer Inst., Edmonton, Alberta (Canada); Weinfeld, M., Cross Cancer Inst., Edmonton, Alberta (Canada);	Low Dose Radiation Hypersensitivity is Caused by p53-dependent Apoptosis	Molecular Cancer Research 2, 557-566	Env Sci

**N**

Gillett, N., Santer, B., Weaver, A.	Stratospheric Cooling and the troposphere	Nature, December 2, 2004	Atm Sci
Bergmann, D.J., Chuang, C.C., Rotman, D.A.	LLNL Scientists Use NERSC to Advance Global Aerosol Simulations	NERSC News, August 2004	Atm Sci
Bogen, K., Marchetti, A.A., Brown, T.A.	Use of a Correlated Compound-Binomial Model to Assess Absence of Non-Counting Noise in Pu-Isotope Ratios Measured by AMS at LLNL	Nuclear Instruments and Methods B223-224, 209	Env Sci
Brown, T.A., Marchetti, A.A., Martinelli, R.E., Cox, C.C., Knezovich, J.P., Hamilton, T.F.	Actinide Measurements by Accelerator Mass Spectrometry at Lawrence Livermore National Laboratory	Nuclear Instruments and Methods B223-224, 78	Env Sci
Ognibene, T.J., Bench, G.S., Brown, T.A., Vogel, J.S.	The LLNL Accelerator Mass Spectrometry System for Biochemical 14C-Measurements	Nuclear Instruments and Methods B223-224, 12-15	Env Sci
Vuong, L.T., Vitalea Science, Inc.; Buchholz, B.A., LLNL; Lame, M.W., UC-Davis; Dueker, S.R., Vitalea Science, Inc. & UC-Davis;	Phytochemical Research Using Accelerator Mass Spectrometry	Nutrition Reviews 62(10), 375-88	Env Sci

**P**

Nelson, D.M., University of Illinois; Hu, F.S., University of Illinois; Tian, J., University of Illinois; Stefanova, I., University of Minnesota; Brown, T.A., LLNL;	Response of C3 and C4 plants to middle-Holocene climatic variation near the prairie-forest ecotone of Minnesota, U.S.A.	Proc. of the National Academy of Sciences 101, 562	Env Sci
Pasyanos, M.E., Walter, W.R., Flanagan, M.P., Goldstein, P., Bhattacharya, J., LLNL;	Building and testing an a <i>Priori</i> Geophysical Model for Western Eurasia and North Africa	Pure and Applied Geophysics 16, 235-281	Earth Sci

**Q**

Wright Jr., H.E., Stefanova, I., Tian, J., Brown, T.A., Hu, F.S.	A Chronological Framework for the Holocene Vegetational History of Central Minnesota: The Steel Lake Pollen Record	Quaternary Science Reviews 23, 611	Env Sci
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**R**

Hughen, K., Woods Hole Oceanographic; Baille, M., Queen's University; Bard, E., CEREGE, Aix-Provence; Beck, J.W., University of Arizona; Bertrand, C.J.H., Woods Hole Oceanographic; Blackwell, P.G., University of Sheffield; Buck, C.E., University of Sheffield; Burr, G.S., University of Arizona; Cutler, K.B., US Department of State; Damon, P.E., University of Arizona; Edwards, R.L., University of Minnesota; Fairbanks, R.G., Columbia University; Friedrich, M., Universität Hohenheim; Guilderson, T.P., LLNL; Kromer, B., Heidelberger Akademie der Wissenschaften; McCormac, F.G., Queen's University; Manning, S., University of Reading; Bronk-Ramsey, C., Oxford University; Reimer, P.J., LLNL; Reimer, R.W., UC Santa Cruz; Remmele, S., Universität Hohenheim; Southon, J.R., UC Irvine; Stuiver, M., University of Washington; Talamo, S., Heidelberger Akademie der Wissenschaften; Taylor, F.W., University of Texas; Van der Plicht, J., Centrum voor Isotopen Onderzoek; Weyhenmeyer, C.E., LLNL;	Marine04 Marine radiocarbon age calibration, 26 _ 0 ka BP	Radiocarbon 46(3), 1059- 1086	Env Sci
Reimer, P.J., LLNL; Brown, T.A., LLNL; Reimer, R.W., Queen's University Belfast;	Discussion: Reporting and calibration of post-bomb 14C data	Radiocarbon 46(3), 1299	Env Sci
Van der Plicht, J., Groningen University; Beck, J.W., University of Arizona; Bard, E., CEREGE, Aix-Provence; Baille, M.G.L., Queen's University; Blackwell, P.G., University of Sheffield; Buck, C.E., University of Sheffield; Friedrich, M., Universität Hohenheim; Guilderson, T.P., LLNL; Hughen, K.A., Woods Hole Oceanographic Institution; Kromer, B., Universität Hohenheim; McCormac, F.G., Queen's University; Ramsey, C.B., Oxford University; Reimer, P.J., LLNL; Reimer, R.W., UC Santa Cruz; Reimer, P.J., LLNL; Reimer, R.W., UC Santa Cruz; Remmele, S., Universität Hohenheim; Richards, D.A., University of Bristol; Southon, J.R., UC Irvine; Stuiver, M., University of Washington; Weyhenmeyer, C.E., LLNL;	NotCal04 - Comparison / Calibration 14C records 26-50 cal kBP	Radiocarbon 46(3), 1225- 1238	Env Sci
Vogel, J.S., LLNL; Ognibene, T., LLNL; Palmlad, M., LLNL; Reimer, P., LLNL;	Counting Statistics and Ion Interval Density in AMS	Radiocarbon 46(3)	Env Sci
Zavarin, M., LLNL; Roberts, S.K., LLNL; Hakem, N., LLNL; Sawvel, A.M., LLNL; Kersting, A.B., LLNL;	Eu(III), Sm(III), Np(V), Pu(V), and Pu(IV) Sorption to Calcite	Radiochimica Acta 93, 1- 10	Env Sci

**S**

Chevalier, M.-L., Ryerson, F.J., Tapponnier, P., Finkel, R.C., Van Der Woerd, J., Haibing, L., Qing, L.,	Slip-rate measurements on the Karakorum Fault may imply secular variations in fault motion	Science 307, 411-414	Earth Sci
Guilderson, T.P., LLNL; Guilderson, T.P., LLNL; Reimer, P.J., LLNL; Brown, T.A., LLNL;	Timing is Everything: The Boon and Bane of 14C Geochronology	Science 307, 362-364	Env Sci
Marcy, T.P., Fahey, D.W., Gao, R.S., Popp, P.J., Richard, E.C., Thompson, T.L., Rosenlof, K.H., Ray, E.A., Salawitch, R.J., Atherton, C.S., Bergmann, D.J. , Ridley, B.A., Weinheimer, A.J., Loewenstein, J., Weinstock, E.M., Mahoney, M.J.	Quantifying stratospheric ozone in the upper troposphere using <i>in situ</i> measurements of HC1	Science 304, 261-265	Atm Sci
Reusser, L.J., University of Vermont; Bierman, P.R., University of Vermont; Pavich, M.J., USGS Reston, VA; Zen, E., University of Maryland; Larsen, J., University of Vermont; Finkel, R., LLNL;	Rapid Late Pleistocene Incision of Passive Margin River Gorges	Science 305, 499-502	Env Sci
Santer, B., Wehner, M., Wigley, M.T., Sausen, R.	Response to comment on "Contributions of Anthropogenic and Natural Forcing to Recent Tropopause Height Changes:	Science 303, 19	Atm Sci
Barnard, P.L., LLNL; Owen, L.A., UC Riverside; Finkel, R.C., LLNL;	Style and timing of glacial and paraglacial sedimentation in a monsoon-influenced high Himalayan environment, the upper Bhagirathi Valley, Garhwal Himalaya	Sedimentary Geology 165, 199-221	Env Sci
Buchholz, B.A., LLNL; Mueller, C.J., Sandia National Laboratory; Upatnieks, A., Sandia National Laboratory; Martin, G.C., Sandia National Laboratory; Pitz, W.J., LLNL; Westbrook, C.K., LLNL;	Using Carbon-14 Isotope Tracing to Investigate Molecular Structure Effects of the Oxygenate Dibutyl Maleate on Soot Emissions from a DI Diesel Engine	Soc. Automotive Engineers, Tech. Paper 2004-01-1849	Env Sci
Heuze, F., LLNL; Archuleta, R., LLNL; Bonilla, F., Day, S., Doroudian, M., Elgamal, A., Hoehler, M., Lai, T., Lavallee, D., Lawrence, B., Liu, P-C., Martin, A., Matesic, L., Mellors, R., Minster, B., Oglesby, D., Park, S., Riemer, M., Steidl, J., Vernon, F., Vucetic, M., Wagoner, J., Yang, Z.	Estimating Site-Specific Strong Earthquake Motions	Soil Dynamics and Earthquake Engineering 24(3), 199-223	Earth Sci
Robison, W.L., LLNL; Stone, E.L., University of Florida; Hamilton, T.F., LLNL;	Large Plate Lysimeter Efficiency for Collecting Water Transported from Soil to Ground Water	Soil Science 169, 11,758- 764	Env Sci
Martin, L.P., Pham, Q., Glass, R.S.	Electrochemical Hydrogen Sensor for Safety Monitoring	Solid State Ionics 175, 527-530	Enrgy Tech

# V

Hu, Q., Kneafsey, T.J. Roberts, J.J., Tomutsa, L., and Wang, J.S.Y. Characterizing Unsaturated Diffusion in Porous Tuff Gravels Vadose Zone Journal 3(4), 1425-1438 Earth Sci

## Books and Book Sections

Bourcier, W.L., LLNL; Sickafus, K., Los Alamos National Laboratory;	Storing Waste in Ceramics	<i>Uncertainty Underground: Dealing With the Nation's High-level Nuclear Waste</i> , MIT Press, in press	Env Sci
Dingley, K.H., Ubick, E.A., Vogel, J.S., LLNL; Haack, K.	DNA Isolation and Sample Preparation for Quantification of Adduct Levels by Accelerator Mass Spectroscopy	<i>Protocols in Molecular Toxicology</i> , P. Keohavong and S.G. Grant, eds., Humana, Totowa, NJ	Env Sci
Gifford-Gonzales, D., UC Santa Cruz; Newsome, S., UC Santa Cruz; Koch, P., UC Santa Cruz; Guilderson, T., LLNL; Snodgrass, J., Northwestern Univ.; Burton, R., Moss Landing Marine Laboratories;	<i>Archaeofaunal Insights on Pinniped-Human Interactions in the Northeastern Pacific</i> , in press		Env Sci
Hoffert, M.I., Caldeira, K.	Climate Change and Energy — An overview	<i>Encyclopedia of Energy</i> , C. Cleveland, ed., Academic Press, San Diego, CA, 359-380	Atm Sci
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Berryman, J.G., LLNL;	Comparison of up-scaling methods in poroelasticity and its generalizations	ASCE Engineering Mechanics Conf., Newark, DE, 6/14-15, 2004	UCRL-CONF-204710	Earth Sci
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Chipman, V., LLNL; Case, J., Bechtel/SAIC Company;	Yucca Mountain Project Preclosure Ventilation Heat Transfer Analysis: Sensitivity of the Ventilation Efficiency to Uncertainties in Key inputs and Design Parameters	ASME Heat Transfer/ Fluids Engineering Summer Conf., Charlotte, NC, 7/11-15, 2004	UCRL-CONF-203691	Enrgy Tech
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Lian, T., M. Whalen, L. Wong	Corrosion Behavior of Titanium Grade 7 in Fluoride-Containing NaCl Brines	206th Mtg of the Electro-chem. Society, Honolulu, HI, Oct. 3-8, 2004	UCRL-CONF-207609	YMP
Lu, S., G. Gordon, P. Anderson	Validation of Stress Corrosion Cracking Model for High Level Radioactive-Waste Packages	ASME 2004 Pressure Vessels and Piping Conf., San Diego, CA, July 25-29, 2004	UCRL-CONF-204004	YMP
Rebak, R., LLNL	Environmentally Assisted Cracking of Nickel Alloys - A Review	Proc. 2nd Int. Conf. on Environment-Induced Cracking of Metals, Banff, Alberta, CA, 9/19-23, 2004	UCRL-PROC-205678	YMP
Rebak, R., LLNL; F. Hua, BSC	The Role of Hydrogen and Creep in Intergranular Stress Corrosion Cracking of Alloy 600 and Alloy 690 in PWR Primary Water Environments - A Review	Proc. 2nd Int. Conf. on Environment-Induced Cracking of Metals, Banff, Alberta, CA, 9/19-23, 2004	UCRL-PROC-205679	YMP

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Vogel, J.S.	Highly Sensitive 14C and 3H Quantification of Biochemical Samples Using Accelerator Mass Spectrometry	Proc. Synthesis and Applica- tions of Isotopically Labeled Compounds Volume 8, D. C. Dean, C. N. Filer and K. E. McCarthy, eds., John Wiley & Sons, Chichester, England, 2004	UCRL- CONF- 200522	Env Sci

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Flanagan, M.P., LLNL; Myers, S.C., LLNL;	Regional Travel-Time Predictions, Uncertainty and Location Improvement	Seismic Research Review, Orlando, FL, 9/21-23, 2004	UCRL-CONF-204605	Earth Sci
Foxall, W., LLNL; Schultz, C.A., LLNL; Tralli, D.M., Jet Propulsion Laboratory;	Laser- and Radar-based Mission Concepts for Suborbital and Spaceborne Monitoring of Seismic Surface Waves	2005 IEEE Aerospace Conf., Big Sky, MT, 3/5-12, 2005	UCRL-CONF-206807	Earth Sci
Harben, P.E., LLNL; Matzel, E., LLNL; Blackman, D., Scripps Institution of Oceanography; Clarke, D., LLNL;	Hydroacoustic Blockage Calibration for Discrimination: Results from 2003 Indian Ocean Cruise, and Imploding Sphere Calibration Source Development	26th Seismic Research Review, Orlando, FL, 9/21-23, 2004	UCRL-CONF-204418	Earth Sci
Harris, D.B., LLNL;	Detection of Uncertain Seismic Signals	Acoustic Soc. America, New York, NY, 5/25, 2004	UCRL-CONF-204294	Earth Sci
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Liu, B.T., LLNL; Lomov, I., LLNL; Vorobiev, O., LLNL;	Simulation of Shock Loading in Saturated Geologic Materials	Int. Symp. on Plasticity 2005, Kauai, HI, 1/3-8, 2005	UCRL-PROC-206631	Earth Sci
Lomov, I., LLNL; Antoun, T.H., LLNL;	Simulation of Geomaterials Using Continuum Damage Models on an Eulerian Grid	11th Int.I Conf. on Fracture, Turin, Italy, 3/20-25, 2005	UCRL-CONF-206641	Earth Sci
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Morris, J.P., LLNL; Bonner, M.P., LLNL;	Simulation of an Extensive Underground Structure Subjected to Dynamic Loading Using the Distinct Element Method	Third M.I.T. Conf. on Computational Fluid and Solid Mechanics, Cambridge, MA, 6/14-15, 2005	UCRL-CONF-208024	Earth Sci
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Myers, S.C., LLNL; Preston, L., University of Nevada, Reno; Larsen, S., LLNL; Smith, K., University of Nevada, Reno; Walter, W.R., LLNL;	Simulation of Regional Explosion S-Phases (SIRE) Project	Seismic Research Review, Orlando, FL, 9/21-23, 2004	UCRL-CONF-204629	Earth Sci

Pasyanos, M.E., LLNL; Walter, W.R., LLNL; Tkalcic, H., LLNL; Franz, G.A., LLNL; Flanagan, M.P., LLNL;	Geophysical Model Research and Results	Seismic Research Review, Orlando, FL, 9/21-23, 2004	UCRL-CONF-204630	Earth Sci
Ruppert, S.D., LLNL; Dodge, D.A., LLNL; Elliott, A., LLNL; Ganzberger, M., LLNL; Hauk, T.F., LLNL; Matzel, E., LLNL; Ryall, F., LLNL;	Enhancing Seismic Calibration Research Through Software Automation	Seismic Research Review, Orlando, FL, 9/21-23, 2004	UCRL-CONF-204631	Earth Sci
Walter, W.R., LLNL; Mayeda, K.M., LLNL; Rodgers, A.J., LLNL; Taylor, S.R., Los Alamos National Laboratory; Dodge, D.A., LLNL; Matzel, E.M., LLNL; Ganzberger, M.D., LLNL;	Regional Seismic Identification Research: Processing, Transportability and Source Models	Seismic Research Review, Orlando, FL, 9/21-23, 2004	UCRL-CONF-204606	Earth Sci